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Course: IT FDN 130 A

Module 06: Views

Assignment 06 – Views

Introduction

This module covered Views, Functions, and Stored Procedures. It was explained that SQL Views and Functions are "Named" statements when writing SQL Script. This document will go to explain when a SQL View would be used and then explain the differences and similarities between a View, Function, and a Stored Procedure.

Explain when you would use a SQL View.

Views can simplify complex queries. By encapsulating a complex JOIN or aggregate query within a view, you can simplify the SQL statements required to retrieve data.

Explain View, Function, and Stored Procedure

View - Any view that is used to extract data for reporting purposes is called a "Reporting View" and are used to save Select statements

```
Create View vProducts
  AS
    Select ProductID, ProductName,CurrentPrice = UnitPrice, CategoryID,
Discontinued
      From Northwind.dbo.Products;
go
Select * from vProducts;
Go
```

Function - User Defined Functions, or UDFs, can use parameters to change the results of the query. There are two basic types of functions; functions that return a table of values and functions that return a single value.

```
Create Function dbo.fProducts()
 Returns Table
 AS
   Return(
     Select ProductID, ProductName, CategoryId, Discontinued
         From Northwind.dbo.Products
```

```
        );
    go
        Select * from dbo.fProducts();
```

Function with Parameters

```
Alter Function dbo.fProducts(@CategoryId int)
 Returns Table
 AS
   Return(
   Select ProductID, ProductName
    From Northwind.dbo.Products
       Where CategoryID = @CategoryId
   );
go
Select * From dbo.fProducts(1);
go
```

Stored Procedure - Like Views or Functions, Stored Procedures (Sprocs or Procs) are a Named Set of SQL Statements.

```
Create Procedure pProducts()
AS
   Select ProductID, ProductName, CategoryId, Discontinued
       From Northwind.dbo.Products;
go
Execute pProducts();
Go
```

Summary

This module covered Views, Functions, and Stored Procedures. We learned how a View is used. Then went into a brief explanation of when a SQL View, Function, and a Stored Procedure.